

REMARKS/ARGUMENTS

After the foregoing Amendment, claims 30-34 and 37-38 are currently pending in this application. Claims 30-33 and 37-38 are amended. Claims 35 and 36 are canceled. Applicants submit that no new matter has been introduced into the application by these amendments.

Claim Rejections - 35 USC §103

Claims 30, 31 and 33-36 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Publication No. 2003/0214932 to Ariyoshi et al. (hereinafter “Ariyoshi”) in view of U.S. Publication No. 2005/0054366 to Chen et al. (hereinafter “Chen”).

Claim 32 is rejected under 35 U.S.C. §103(a) as being unpatentable over Ariyoshi in view of Chen as applied to claim 30 and further in view of U.S. Patent No. 6,470,001 to Kim et al. (hereinafter “Kim”).

Claims 37 and 38 are rejected under 35 U.S.C. §103(a) as being unpatentable over Ariyoshi in view of Chen as applied to claim 36 and further in view of U.S. Patent No. 6,438,377 to Savolainen (hereinafter “Savolainen”).

Applicants disclose a method and base station for timing alignment of a field unit that comprises receiving a reverse link signal from a field unit and determining a gross timing offset with respect to other reverse link signals from other field units

sharing the same reverse link logical channel. A coarse timing adjustment is performed by the field unit based on the gross timing offset information, and following the coarse timing adjustment, a fine timing adjustment is calculated based on a metric of the transmission path between the base station and the field units associated with the received reverse link signal.

The references cited by the Examiner do not disclose Applicants' claimed method and base station.

Ariyoshi discloses a system comprising a base station and a plurality of terminal stations, the base station providing a plurality of channels to forward and reverse links and each terminal station being provided in correspondence with each channel constituted of a pair of forward and reverse links. The base station feeds back on a forward link to a terminal station, indicating a phase difference between a phase of a received signal detected at each channel on a reverse link and a reference phase of a de-spreading code at the base station. Each terminal station synchronizes a phase of a spreading code of a transmitting signal on the reverse link with the reference phase at the base station, in accordance with the phase difference information received at the corresponding forward link of the channel. See Ariyoshi, paragraphs [0016] to [0019].

As set forth in Ariyoshi, the base station determines a phase difference for each channel associated with a terminal station. Ariyoshi does not determine a

gross timing offset of a terminal station with respect to reverse link channels from other terminal stations sharing the same reverse link logical channel, as required by Applicants' disclosed method. As the Examiner has admitted, Ariyoshi also does not disclose calculating fine timing adjustment associated with the received reverse link signal, and selectively determining based on a transmission path metric whether the base station should control the alignment of the field unit during a soft handover. See Office Action, page 3.

As previously argued by Applicants, Chen discloses a method and apparatus for adjusting the transmission power of base stations in simultaneous communication with a mobile station. Like Ariyoshi, Chen does not disclose the determination of a gross timing offset with respect to reverse link channels from other field units sharing the same reverse link logical channel, determining a fine timing offset based on a metric of the reverse link transmission path, and selectively determining, based on the metric, whether the base station should control the timing alignment of the field unit. In Chen, the mobile station determines the transmit power to be used by the base station the mobile station is being handed to. The base station in Chen does not determine a gross timing offset relative to other field units, nor does the base station determine whether it should control the alignment during a soft handover. Accordingly, Chen is contrary to Applicants' disclosed method and apparatus.

Applicant: Proctor, Jr. et al.
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Neither Kim, nor Savolainen, disclose those elements of Applicants' disclosed method and apparatus missing from Ariyoshi and Chen. Therefore, Ariyoshi, Chen, Kim, or Savolainen, alone or in combination with one another, do not disclose Applicants' method and apparatus claimed in claim 30.

Claims 31-38 are dependent upon claims, 30, 31, 33, 35, 36 and 37 and the Applicant believes these claims are allowable over the cited references of record for the same reasons provided above.

Based on the arguments presented above, withdrawal of the §103 rejection is respectfully requested.

Conclusion

If the Examiner believes that any additional minor formal matters need to be addressed in order to place this application in condition for allowance, or that a telephonic interview will help to materially advance the prosecution of this application, the Examiner is invited to contact the undersigned by telephone at the Examiner's convenience.

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In view of the foregoing amendment and remarks, Applicants respectfully submit that the present application is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

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